



Determination of Rate and Causes of Wastage of Blood and Blood Products in Iranian Hospitals

İran Hastanelerinde Kan ve Kan Ürünleri İsrafının Oran ve Nedenlerinin Belirlenmesi

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Abstract:

Objective: The purpose of this study was to determine the rate and causes of wastage of blood and blood products (packed red cells, plasma, platelets, and cryoprecipitate) in Qazvin hospitals.

Materials and Methods: The study was conducted in all hospitals in Qazvin, including 5 teaching hospitals, 2 social welfare hospitals, 3 private hospitals, 1 charity hospital, and 1 military hospital. This descriptive study was based on available data from hospital blood banks in the province of Qazvin. The research instrument was a 2-part questionnaire. The first part was related to demographic characteristics of hospitals and the second part elicited information about blood and blood component wastage. The collected data were then analyzed using descriptive statistic methods and SPSS 11.5.

Results: Blood wastage may occur for a number of reasons, including time expiry, wasted imports, blood medically or surgically ordered but not used, stock time expired, hemolysis, or miscellaneous reasons. Data indicated that approximately 77.9% of wasted pack cell units were wasted for the reason of time expiry. Pack cell wastage in hospitals is reported to range from 1.93% to 30.7%. Wastage at all hospitals averaged 9.8% among 30.913 issued blood products. Overall blood and blood product (packed red cells, plasma, platelets, and cryoprecipitate) wastage was 3048 units and average total wastage per participant hospital for all blood groups was 254 units per year.

Conclusion: Blood transfusion is an essential part of patient care. The blood transfusion system has made significant advancements in areas such as donor management, storage of blood, cross-matching, rational use of blood, and distribution. In order to improve the standards of blood banks and the blood transfusion services in Iran, comprehensive standards have been formulated to ensure better quality control in collection, storage, testing, and distribution of blood and its components for the identified major factors affecting blood product wastage.

Key Words: Blood, Blood component, Wastage, Transfusion, Blood bank

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